

**SYSTEM AND METHOD FOR EFFECTIVELY RENDERING
HIGH DYNAMIC RANGE IMAGES**

5

ABSTRACT OF THE DISCLOSURE

A system and method for effectively rendering high dynamic range images may include a rendering manager that initially divides an original luminance image into a plurality of original subband images. The rendering manager may then convert the original subband images into original contrast images which may then be converted into original perceived contrast images. The rendering manager may then perform a compression procedure upon the original perceived contrast images to produce compressed perceived contrast images. The rendering manager may next convert the compressed perceived contrast images into compressed contrast images which may then be converted into compressed subband images. The rendering manager may then perform a subband combination procedure for combining the compressed subband images together with a lowest-frequency subband image to thereby generate a rendered luminance image. The rendering manager may finally combine rendered the rendered luminance image with corresponding chrominance information to generate a rendered composite image that may be utilized in any appropriate manner.